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#### Remarks:

The above amendments and these remarks are being filed in response to the non-final Office action dated October 18, 2007. Claims 83-100, 102-109, 118-120, 123-128, 131-133, 136, 140, 141, and 148-150 are pending in the application, prior to entry of the present amendments to the claims. In the Office action, the Examiner

- (1) rejected claims 83-85, 87-89, 91-95, 98, 99, 102, 105-107, 118, 123, 126, 131, 136, 140, and 141 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,048,337 to Svedman ("Svedman");
- (2) rejected claims 86, 96, 97, 119, 120, 127, 128, and 148-150 under 35 U.S.C. § 103(a) as being unpatentable over Svedman;
- (3) rejected claims 90 and 100 under 35 U.S.C. § 103(a) as being unpatentable over Svedman in view of U.S. Patent No. 5,480,062 to Rogers et al. ("Rogers");
- (4) rejected claims 103 and 104 under 35 U.S.C. § 103(a) as being unpatentable over Svedman in view of U.S. Patent No. 6,325,475 to Hayes et al. ("Hayes");
- (5) rejected claims 108 and 109 under 35 U.S.C. § 103(a) as being unpatentable over Svedman in view of U.S. Patent No. 5,860,957 to Jacobsen et al. ("Jacobsen"); and
- (6) rejected claims 124, 125, 132, and 133 under 35 U.S.C. § 103(a) as being unpatentable over Svedman in view of U.S. Patent No. 5,179,947 to Meyerson et al. ("Meyerson").

Applicants traverse the rejections, contending that all of the pending claims are patentable over the cited references, taken alone or in combination.

Nevertheless, to expedite the issuance of a patent, and to more particularly point out and distinctly claim aspects of the invention that applicants would like to patent now, applicants have amended each of the two independent claims, claims 83 and 91, and have added three new claims, namely, claims 183-185. However, applicants reserve the right to pursue either or both of the amended claims, in original or distinctly amended form, at a later time. Furthermore, applicants have presented remarks showing that all

Page 12 - RESPONSE TO OFFICE ACTION Serial No. 10/791,974 HP Docket No. 10004227-9 KH Docket No. HPCC 3E5DIV of the pending claims are patentable over the cited references, taken alone or in combination. Accordingly, in view of the amendments above and the remarks below, applicants respectfully request reconsideration of the application under 37 C.F.R. § 1.111 and prompt allowance of all of the pending claims.

# I. Claim Amendments

The present communication amends each of the two independent claims, namely, claims 83 and 91; and adds three new dependent claims, namely, claims 183–185. Each amendment to an existing claim and each of the new claims is fully supported by the application. Exemplary support for each amendment is listed, without limitation, in the following table:

Claim	Exemplary Support
83 (Independent)	Page 4; paragraph [21];
	Pages 21 and 22, paragraphs [71-74];
	Figure 8
91 (Independent)	Page 22, paragraph [73];
	Figures 1–8
183 (New)	Page 22, paragraph [73];
	Figures 1–8
184 (New)	Page 21, paragraphs [21] and [71-74];
	Figure 8
185 (New)	Page 22, paragraph [73]

### II. Claim Rejections - 35 U.S.C. §§ 102 and 103

The Examiner rejected all of the pending claims under 35 U.S.C. § 102(b) as being anticipated by Svedman or under 35 U.S.C. § 103(a) as being obvious over Svedman alone or in combination with another reference. Applicants traverse the rejections, contending that each of the claims is patentable over the cited references,

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taken alone or in combination. Nevertheless, for the reasons set forth above, applicants have amended independent claims 83 and 91 and have added new claims 183–185. Each of the pending claims is patentable for at least the reasons set forth below.

A. Claims 83-90, 102-104, 108, 118-120, 123-125, 136, 140, 148, 149, and 183

i. Claim 83

Independent claim 83, as currently amended, reads as follows:

83. (Currently Amended) A method of administering a bioactive composition to a subject, the method comprising:

applying to a cutaneous surface of the subject a jet dispenser comprising a container holding the bioactive composition;

dispensing the bioactive composition in droplets from the dispenser through at least one orifice toward the cutaneous surface <u>such that the bioactive composition becomes airborne upon leaving the at least one orifice and remains airborne until coming into contact with the cutaneous surface or a dermal patch thereon; and</u>

retaining the bioactive composition in prolonged contact with the cutaneous surface.

In the Office action, the Examiner rejected claim 83 as being anticipated by Svedman. However, Svedman does not disclose, teach, or suggest every element of currently amended claim 83. For example, Svedman does not disclose, teach, or suggest dispensing a bioactive composition "such that the bioactive composition becomes airborne upon leaving the at least one orifice and remains airborne until coming into contact with the cutaneous surface or a dermal patch thereon."

Page 14 - RESPONSE TO OFFICE ACTION Serial No. 10/791,974 HP Docket No. 10004227-9 KH Docket No. HPCC 3E5DIV Svedman relates to a device for transdermal perfusion of fluids through deepithelialized sites. The Examiner referred to Figure 78 and column 35, lines 46-63, of Svedman in rejecting the claims. However, the cited text of Svedman relates to Figure 79, which is reproduced here to facilitate review.

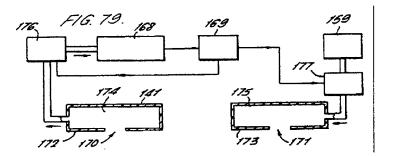


Figure 79 involves a device for use with two separate de-epithelialized sites 170 and 171. On the left, exudate is received from de-epithelialized site 170 in a sample cell 174 defined by an enclosure 172 disposed over site 170. On the right, drug is delivered to de-epithelialized site 171 via a sample cell 175 defined by an enclosure 173 disposed over site 171.

A pump 177 drives drug from a reservoir 159 to sample cell 175. Significantly, pump 177 is offset laterally from sample cell 175. Figure 79 depicts conduits for conveying the drug to and from pump 177. An upstream conduit extends from reservoir 159 to pump 177, and a downstream conduit extends from pump 177 to a side entry port of enclosure 173. In addition, the downstream conduit bends between pump 177 and enclosure 173 due to the lateral offset of pump 177 and sample cell 175.

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Pump 177 is disclosed to be "a micro pump of the type normally used in bubble

jet ink printers." The Examiner thus asserted that Svedman discloses "dispensing the

bioactive composition in droplets" from pump 177. However, currently amended claim

83 recites dispensing in which the bioactive composition "remains airborne until coming

into contact with the cutaneous surface or a dermal patch thereon." In Svedman, pump

177 dispenses drug into the downstream conduit for transport to cell 175. Applicants

contend that delivery of drug to the side of enclosure 173, the presence of a

downstream conduit, and particularly the sharply bent configuration of the downstream

conduit, all demonstrate that Svedman intended the drug to flow into sample cell 175,

with the drug supported by and in contact with the downstream conduit. Claim 83, in

contrast, recites that the bioactive composition remains airborne until coming into

contact with the cutaneous surface or a dermal patch thereon.

In summary, applicants submit that Svedman does not anticipate claim 83. None

of the other cited references correct the defect in Svedman. Claim 83 thus should be

allowed. Claims 84-90, 102-104, 108, 118-120, 123-125, 136, 140, 148, 149, and 183,

which depend ultimately from claim 83, also should be allowed for at least the same

reasons as claim 83.

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#### ii. New Claim 183

New claim 183 depends from independent claim 83 and recites "wherein dispensing is performed with the orifice spaced from and directly above the cutaneous surface or the dermal patch that the bioactive composition will contact." Assuming arguendo that Svedman were to be construed as disclosing a bioactive composition that remains airborne until coming into contact with a cutaneous surface or a dermal patch thereon, as recited by claim 83, applicants submit that Svedman does not position the orifice in the manner recited by claim 183. Instead, Svedman involves delivering drug into cell 175 via an offset and bent path to a de-epithelialized site. Claim 183 thus should be allowed not only for depending from allowable claim 83, but also for being further distinguished from the cited references.

### B. Claims 91-100, 105-107, 109, 126-128, 131-133, 141, 150, 184, and 185

#### i. Claim 91

Independent claim 91, as currently amended, reads as follows:

91. (Currently Amended) A method of administering a bioactive composition to a subject, the method comprising:

applying a cutaneous patch to skin of the subject; and

dispensing the bioactive composition from an inkjet dispenser by ejection through an orifice <u>spaced from and directly above a face of</u> [[to]] the patch.

In the Office action, the Examiner rejected claim 91 as being anticipated by Svedman. However, Svedman does not disclose, teach, or suggest every element of currently amended claim 91. For example, the cited reference does not disclose, teach, or suggest dispensing the bioactive composition "through an orifice spaced from and directly above a face of the patch." In particular, as described above for claim 83,

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Svedman involves delivering a drug from a laterally offset pump, through a bent conduit, and into an enclosure via a side port of the enclosure. None of the other cited references corrects this defect in Svedman. Claim 91 thus should be allowed. In addition, claims 92-100, 105-107, 109, 126-128, 131-133, 141 150, 184, and 185, which depend ultimately from claim 91, also should be allowed for at least the same reasons as claim 91.

### ii. New Claims 184 and 185

New claims 184 and 185 depend from independent claim 91.

Claim 184 recites "wherein dispensing is performed such that the bioactive composition becomes airborne upon leaving the orifice and remains airborne until the bioactive composition comes into contact with the patch." Svedman does not disclose, teach, or suggest a bioactive composition dispensed in the airborne fashion recited by claim 184 for the reasons presented above for claim 83.

Claim 185 recites "wherein dispensing includes dispensing the bioactive composition as droplets that travel from the orifice to the patch across an air gap that extends directly from the orifice to the patch." Svedman does not disclose, teach, or suggest dispensing in the manner recited by claim 185. Instead, Svedman involves delivering a drug to a de-epithelialized site via an offset and bent path.

In summary, claim 184 and 185 thus should be allowed not only for depending from allowable claim 91, but also for being further distinguished from the cited references.

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## III. Conclusion

Applicants submit that this application is now in condition for allowance, in view of the above amendments and remarks. Accordingly, applicants respectfully request that the Examiner issue a Notice of Allowance covering all of the pending claims. If the Examiner has any questions, or if a telephone interview would in any way advance prosecution of the application, please contact the undersigned attorney of record.

Respectfully submitted,

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### **CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this correspondence is being facsimile transmitted to Examiner M. Hand, Group Art Unit 3761, Assistant Commissioner for Patents, at facsimile number (571) 273-8300 on January 15, 2008.

Christia A. Doolittle

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